REMARKS

Receipt of the Office Action of March 24, 2006 is gratefully acknowledged.

The objection to claims 64-66, 73, 79 and 80 is noted. These claims have been cancelled.

The finality of the restriction requirement is noted.

The rejection of claims 14-16, 20, 21, 28-36, 47-58, 61, 62 and 64-66 as unpatentable under 35 USC 103(a) over Otto et al. in view of Woodward et al. and Lalla et al.; of claims 17-19, 24-26, 37-41, 45, 46, 63 and 72-82 under 35 USC 103(a) over Otto et al. in view of Woodward et al., Lalla et al. and Fehrenbach and of claims 14, 15, 21, 28-32, 34k, 35, 47-55, 62 and 65 as anticipated under 35 USC 102(a) by Lalla et al. are noted and respectfully traversed.

Neither Lalla et al, Woodward et al nor Otto et al teach a volatile memory (RAM) for storing a digitized intermediate frequency signal or a finite sampling sequence of the intermediate frequency signal having an intermediate frequency range above 50kHz. Woodward et al discloses no more than a transmit signal having a repetition rate above 1 MHz and a center frequency (= microwave frequency) above 0.5 GHz. In col. 5, lines 49 - 58 of Lalla et al it is disclosed that the analogue intermediate frequency signal has to be demodulated by a demodulator 26, i.e., a rectifier. Consequently, *only* the analogue envelop signal is available at the input of the first subcircuit 27 (= sample & hold circuit 29 and A/D converter 31), but not an analogue intermediate frequency signal having an intermediate frequency above 50kHz. Therefore, only a finite sampling sequence of the intermediate frequency of the envelope signal can be stored. A finite sampling sequence of the intermediate frequency signal according to the present invention cannot be stored because such a finite sampling sequence of the intermediate frequency signal does not exist in the Lalla et al guage. Otto et al also does not disclose or suggest the use of a digitized intermediate frequency signal.

None of the references of record disclose the use of a finite sampling sequence of the intermediate frequency signal stored within a volatile data memory in a level gauge according to the pulse radar principle. To extrapolate from Otto et al and Lalla

et al the use of a digitized intermediate frequency signal for level measuring instead of a digitized envelop signal can only be done by applying the teaching of the present invention, and that is impermissible.

In view of the foregoing, the examiner is urged to reconsider his rejections and find claims 14 - 21, 24 - 26, 28 - 41, 45 - 48, 61 - 63, 72, 74 - 78, 81 and 82 allowed along with claims 27, 42 - 44, 59 and 60.

Respectfully submitted,

Date: June 26, 2006
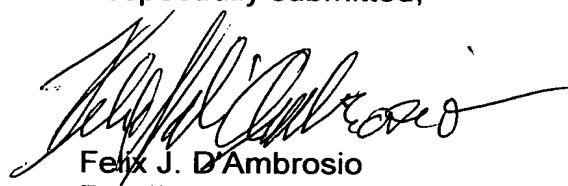
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